ABSTRACT

Decellularized tissues prepared by conventional technology are occasionally to be improved with respect to the strength, etc. thereof according to situations. The reason is that cells are removed from tissues by the decellularization, occasionally resulting in poor strength of the tissues. It is intended to provide a method of increasing the tissue strength for the decellularized tissues. There is provided a method comprising treating the decellularized tissues with a biocompatible polymer. Unexpectedly strong reinforcing effect for the decellularized tissues by a biocompatible polymer, preferably one polymerized through radical reaction using gamma rays, etc. has been found. Decellularization can be performed by the use of arbitrary technique, for example, using a surfactant such as SDS, or using an amphiphilic molecule such as PEG.